

ELEVATION CERTIFICATE

Important: Read the instructions on pages 1-9.

OMB No. 1660-0008
 Expiration Date: July 31, 2015

SECTION A - PROPERTY INFORMATION

A1. Building Owner's Name **LUBKE CONSTRUCTION, LLC** FOR INSURANCE COMPANY USE
 Policy Number:
 A2. Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No. **309 Freemantle Way** Company NAIC Number:
 City **Redington Shores** State **FL** ZIP Code **33708**

A3. Property Description (Lot and Block Numbers, Tax Parcel Number, Legal Description, etc.)
LOT 38, REDINGTON SHORES YACHT & TENNIS CLUB, PB 130, PG 42-44 PUBLIC RECORDS OF PINELLAS COUNTY, FL

A4. Building Use (e.g., Residential, Non-Residential, Addition, Accessory, etc.) **RESIDENTIAL**

A5. Latitude/Longitude: Lat. **27°49'37"** Long. **82°49'35"** Horizontal Datum: NAD 1927 NAD 1983

A6. Attach at least 2 photographs of the building if the Certificate is being used to obtain flood insurance.

A7. Building Diagram Number **7**

A8. For a building with a crawlspace or enclosure(s):

- a) Square footage of crawlspace or enclosure(s) **NA** sq ft
 b) Number of permanent flood openings in the crawlspace or enclosure(s) within 1.0 foot above adjacent grade **NA** sq in
 c) Total net area of flood openings in A8.b **NA** sq in
 d) Engineered flood openings? Yes No

- A9. For a building with an attached garage:
 a) Square footage of attached garage **1,929** sq ft
 b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade **10**
 c) Total net area of flood openings in A9.b **2,560** sq in
 d) Engineered flood openings? Yes No

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. NFIP Community Name & Community Number **TOWN OF REDINGTON SHORES 125141** B2. County Name **PINELLAS** B3. State **FLORIDA**
 B4. Map/Panel Number **12103 C 0179** B5. Suffix **G** B6. FIRM Index Date **AUG 18, 2009** B7. FIRM Panel Effective/Revised Date **SEPT 3, 2003** B8. Flood Zone(s) **AE** B9. Base Flood Elevation(s) (Zone AO, use base flood depth) **11**

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in item B9.
 FIS Profile FIRM Community Determined Other/Source:

B11. Indicate elevation datum used for BFE in Item B9: NGVD 1929 NAVD 1988 Other/Source:

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)?
 Designation Date: **NA** CBRS OPA Yes No

SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on:
 Construction Drawings Building Under Construction Finished Construction
 *A new Elevation Certificate will be required when construction of the building is complete.

C2. Elevations - Zones A1-A30, AE, AH, A (with BFE), VE, V1-V30, V (with BFE), AR, ARA, AR/AE, AR/A1-A30, AR/AH, AR/AO. Complete items C2.a-h below according to the building diagram specified in item A7. In Puerto Rico only, enter meters.

Benchmark Utilized: **REDINGTON B & REDINGTON C** Vertical Datum: **NAVD88**

Indicate elevation datum used for the elevations in items a) through h) below. NGVD 1929 NAVD 1988 Other/Source: _____

Check the measurement used.

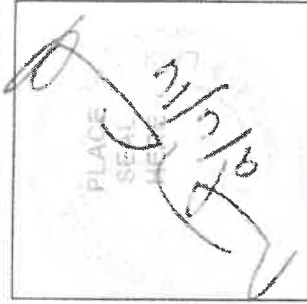
- a) Top of bottom floor (including basement, crawlspace, or enclosure floor) **6.68** feet meters
 b) Top of the next higher floor **17.65** feet meters
 c) Bottom of the lowest horizontal structural member (V Zones only) **NA** feet meters
 d) Attached garage (top of slab) **6.68** feet meters
 e) Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments) **15.6** feet meters
 f) Lowest adjacent (finished) grade next to building (LAG) **3.9** feet meters
 g) Highest adjacent (finished) grade next to building (HAG) **6.2** feet meters
 h) Lowest adjacent grade at lowest elevation of deck or stairs, including structural support **6.2** feet meters

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

This certification is to be signed and sealed by a land surveyor, engineer, or architect authorized by law to certify elevation information. I certify that the information on this Certificate represents my best efforts to interpret the data available. I understand that any false statement may be punishable by fine or imprisonment under 18 U.S. Code, Section 1001.

- Check here if comments are provided on back of form. Were latitude and longitude in Section A provided by a licensed land surveyor? Yes No
 Check here if attachments.

Certifier's Name **MICHAEL F. CORNNELL** License Number **4987**
 Title **PROJECT SURVEYOR** Company Name **ECHZABAL & ASSOCIATES**
 Address **25400 US Hwy 19N, Ste 137** City **Cleanwater** State **FL** ZIP Code **33763**
 Signature **[Signature]** Date **09/06/2016** Telephone **727-796-8740**



ELEVATION CERTIFICATE, page 2

IMPORTANT: In these spaces, copy the corresponding information from Section A.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.
309 Freemantle Way

FOR INSURANCE COMPANY USE
Policy Number:

City Redington Beach

State FL ZIP Code 33708

Company NAIC Number:

SECTION D – SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION (CONTINUED)

Copy both sides of this Elevation Certificate for (1) community official, (2) insurance agent/company, and (3) building owner.

Comments The elevation listed in C2e is to the top of the metal support brackets for the elevated air conditioners. The top of the seawall along the rear property line is elevation 3.94. The flood vents are Flood Solutions, LLC model FS-1616 (16" Wide x 16" High) and each engineered opening covers 191 square feet. [191 sq ft x 10 vents = 1,910 sq.ft total]

Signature

Date 09/06/2016

SECTION E – BUILDING ELEVATION INFORMATION (SURVEY NOT REQUIRED) FOR ZONE AO AND ZONE A (WITHOUT BFE)

For Zones AO and A (without BFE), complete items E1–E5. If the Certificate is intended to support a LOMA or LOMR-F request, complete Sections A, B, and C. For items E1–E4, use natural grade, if available. Check the measurement used. In Puerto Rico only, enter meters.

E1. Provide elevation information for the following and check the appropriate boxes to show whether the elevation is above or below the highest adjacent grade (HAG) and the lowest adjacent grade (LAG).

a) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ feet meters above or below the HAG.
b) Top of bottom floor (including basement, crawlspace, or enclosure) is _____ feet meters above or below the LAG.

E2. For Building Diagrams 6–9 with permanent flood openings provided in Section A items 8 and/or 9 (see pages 8–9 of Instructions), the next higher floor (elevation C2.b in the diagrams) of the building is _____ feet meters above or below the HAG.

E3. Attached garage (top of slab) is _____ feet meters above or below the HAG.

E4. Top of platform of machinery and/or equipment servicing the building is _____ feet meters above or below the HAG.

E5. Zone AO only: If no flood depth number is available, is the top of the bottom floor elevated in accordance with the community's floodplain management ordinance? Yes No Unknown. The local official must certify this information in Section G.

SECTION F – PROPERTY OWNER (OR OWNER'S REPRESENTATIVE) CERTIFICATION

The property owner or owner's authorized representative who completes Sections A, B, and E for Zone A (without a FEMA-issued or community-issued BFE) or Zone AO must sign here. The statements in Sections A, B, and E are correct to the best of my knowledge.

Property Owner's or Owner's Authorized Representative's Name

Address

City

State

ZIP Code

Signature

Date

Telephone

Comments

Check here if attachments

SECTION G – COMMUNITY INFORMATION (OPTIONAL)

The local official who is authorized by law or ordinance to administer the community's floodplain management ordinance can complete Sections A, B, C (or E), and G of this Elevation Certificate. Complete the applicable item(s) and sign below. Check the measurement used in items G8–G10. In Puerto Rico only, enter meters.

G1. The information in Section C was taken from other documentation that has been signed and sealed by a licensed surveyor, engineer, or architect who is authorized by law to certify elevation information. (Indicate the source and date of the elevation data in the Comments area below.)

G2. A community official completed Section E for a building located in Zone A (without a FEMA-issued or community-issued BFE) or Zone AO.

G3. The following information (Items G4–G10) is provided for community floodplain management purposes.

G4. Permit Number	G5. Date Permit Issued	G6. Date Certificate Of Compliance/Occupancy Issued
G7. This permit has been issued for: <input type="checkbox"/> New Construction <input type="checkbox"/> Substantial Improvement		
G8. Elevation of as-built lowest floor (including basement) of the building: _____ <input type="checkbox"/> feet <input type="checkbox"/> meters Datum _____		
G9. BFE or (in Zone AO) depth of flooding at the building site: _____ <input type="checkbox"/> feet <input type="checkbox"/> meters Datum _____		
G10. Community's design flood elevation: _____ <input type="checkbox"/> feet <input type="checkbox"/> meters Datum _____		

Local Official's Name

Title

Community Name

Telephone

Signature

Date

Comments

Check here if attachments

Building Photographs

See Instructions for Item A6.

IMPORTANT: In these spaces, copy the corresponding information from Section A.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.
 309 Freemantle Way

City Redington Beach

State FL ZIP Code 33708

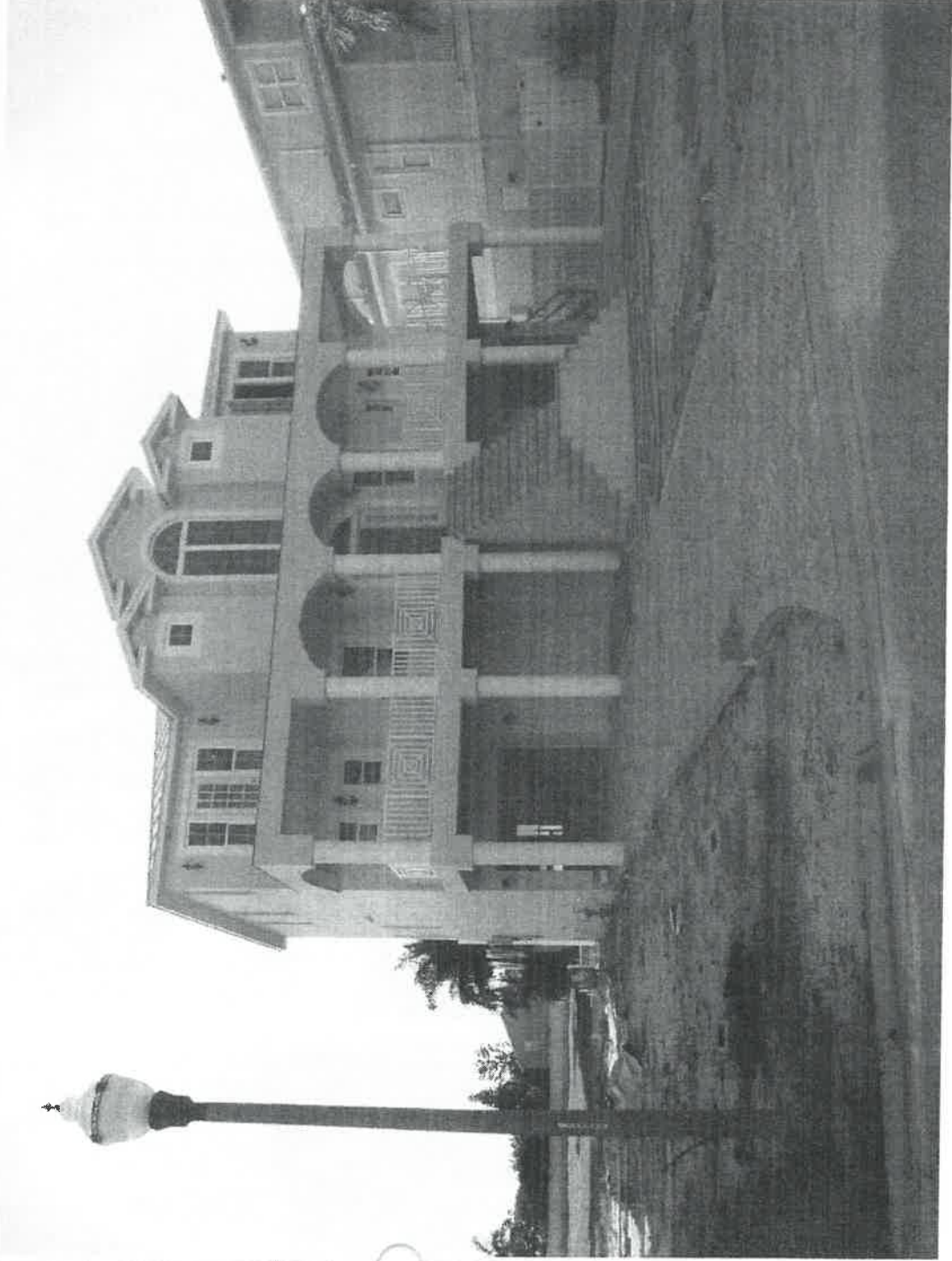
FOR INSURANCE COMPANY USE

Policy Number

Company NAIC Number

If using the Elevation Certificate to obtain NFIP flood insurance, affix at least 2 building photographs below according to the instructions for Item A6. Identify all photographs with date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8. If submitting more photographs than will fit on this page, use the Continuation Page.

FRONT VIEW



COPY

Building Photographs

Continuation Page

IMPORTANT: In these spaces, copy the corresponding information from Section A.

Building Street Address (including Apt., Unit, Suite, and/or Bldg. No.) or P.O. Route and Box No.
09 Freemantle Way

City Redington Beach

State FL

ZIP Code 33708

FOR INSURANCE COMPANY USE
Policy Number:
Company NAIC Number:

If submitting more photographs than will fit on the preceding page, affix the additional photographs below. Identify all photographs with: date taken; "Front View" and "Rear View"; and, if required, "Right Side View" and "Left Side View." When applicable, photographs must show the foundation with representative examples of the flood openings or vents, as indicated in Section A8.

REAR VIEW



 eCOPIY

INSTALLATION INSTRUCTIONS

MODELS: FS AND FS-HEX

ICC-ES CERTIFIED - ENGINEERED

FEMA COMPLIANT FLOOD VENTS

What you'll need:

- 1" Concrete/wood/metal screws which is dependent on what type of wall you will be fastening into
- 1" Anchors for concrete wall installation
- Power Drill
- 1/4" Masonry Bit or 1/4" wood drill bit (dependent on what type of wall you will be fastening into)
- Screwdriver
- Hammer
- Level
- Exterior Caulking
- Flashing, if needed, for an opening with a cavity in the wall (optional)

INSTRUCTIONS:

*****NOTE: BE SURE THAT BOTTOM OF OPENING IS LESS THAN 12" ABOVE THE ADJACENT GRADE. ****

Step 1: PROVIDE A CLEAN, SQUARE AND LEVEL ROUGH OPENING

Step 2: APPLY FLASHING AROUND THE INTERIOR OF THE WALL OPENING

Step 3: LAYOUT THE VENT SO THE OPEN AREAS OF THE VENT HAVE A CLEAR OPENING IF THERE IS A CAVITY IN THE

Step 4: MAKE SURE VENT IS LEVEL

Step 5: MARK HOLES ON WALL AND THEN REMOVE VENT FROM OPENING

FOR CONCRETE WALLS: Use Concrete Screws and Anchors

LOW STEPS 1-5 ABOVE

FOR CONCRETE WALLS: Use Concrete Screws and Anchors

FOR CONCRETE WALLS: Use Concrete Screws and Anchors





ICC-ES Evaluation Report

Most Widely Accepted and Trusted

ESR-3760

Reissued March 2016
This report is subject to renewal March 2018.

www.icc-es.org | (800) 423-6587 | (562) 699-0543

A Subsidiary of the International Code Council®

DIVISION: 08 00 00—OPENINGS
Section: 08 95 43—Vents/Foundation Flood Vents

REPORT HOLDER:

FLOOD SOLUTIONS, LLC
ONE INDUSTRIAL PARK DRIVE
BUILDING 27
PELHAM, NEW HAMPSHIRE 03076
(800) 325-9775
www.floodsolutions.com
info@floodsolutions.com

EVALUATION SUBJECT:

STATIC FLOOD VENTS

1.0 EVALUATION SCOPE

Compliance with the following codes:

- 2015, 2012 and 2009 *International Building Code*®
- 2015, 2012 and 2008 *International Residential Code*®

Property evaluated:

Water flow

2.0 USES

Flood Solutions' static flood vents are used to provide for the equalization of hydrostatic flood forces on exterior walls.

3.0 DESCRIPTION

3.1 General:

Flood Solutions' static flood vents are engineered, permanently open flood vents with no moving parts that automatically allow flood waters to enter and exit enclosed areas. The vents are constructed of aluminum and available in four models. See Table 1 for model designations and sizes. See Figure 1 for illustrations of the flood vents.

3.2 Engineered Opening:

The Flood Solutions static flood vents comply with the design principle noted in Section 2.6.2.2 of ASCE/SEI 24 for a rate of rise and fall of 5 feet per hour (0.423 mm/s) in order to comply with the engineered opening requirement of ASCE/SEI 24. The static flood vents must be installed in accordance with Section 4.0 of this report.

3.3 Ventilation:

Flood Solutions static flood vents may be used to supply natural ventilation for under-floor ventilation. See Table 1

for net free area for under-floor ventilation provided by each of Flood Solutions' static flood vents

4.0 DESIGN AND INSTALLATION

The Flood Solutions static flood vents are designed to be installed into walls or doors of existing or new construction from the exterior side. Installation of the vents must be in accordance with the manufacturer's instructions, the applicable code and this report in order to comply with the engineered opening design principle noted in Section 2.6.2.2 of ASCE/SEI 24. The vents must be installed as follows:

- With a minimum of two opening on different sides of each enclosed area.
- With a minimum of one vent for the square footage of enclosed area noted in Table 1.
- Below the base flood elevation.
- With the bottom of the vent located a maximum of 12 inches (305 mm) above grade.

5.0 CONDITIONS OF USE

The static flood vents described in this report comply with, or are a suitable alternative to what is specified in, those codes listed in Section 1.0 of this report, subject to the following conditions:

5.1 The static flood vents must be installed in accordance with this report, the applicable code, and the manufacturer's installation instructions. In the event of a conflict, the instructions in this report govern.

5.2 The static flood vents must not be used in the place of "breakaway walls" in coastal high hazard areas, but are permitted for use in conjunction with breakaway walls in other areas.

6.0 EVIDENCE SUBMITTED

- 6.1 Manufacturer's descriptive literature and installation instructions.
- 6.2 Detail drawings.
- 6.3 Engineering calculations in accordance with ASCE/SEI 24.
- 6.4 Quality documentation in accordance with the ICC-ES Acceptance Criteria for Quality Documentation (AC10), dated June 2014.

7.0 IDENTIFICATION

The Flood Solutions static flood vents recognized in this report must be identified by a label bearing the manufacturer's name (Flood Solutions) and model number, and the evaluation report number (ESR-3760).



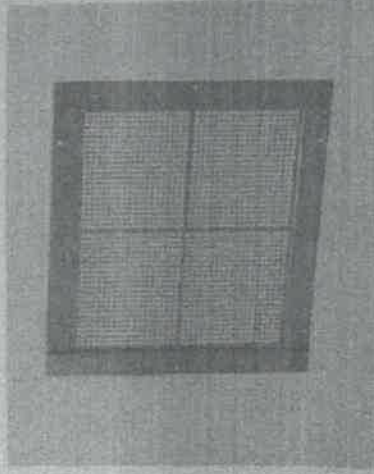
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COPY

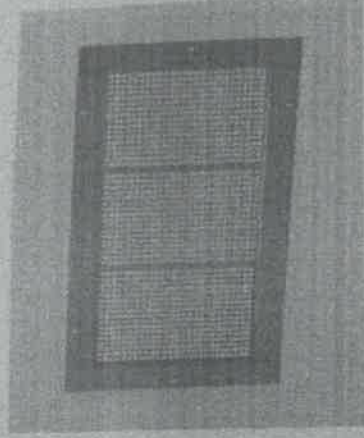
TABLE 1—FLOOD SOLUTIONS STATIC FLOOD VENTS

MODEL	VENT SIZE (Width x Height) (in)	ROUGH OPENING SIZE (Width x Height) (in)	ENCLOSED AREA COVERAGE (ft ²)	NET FREE AREA ¹ (in ²)
FS-1608	16 1/2 x 10 1/2	16 x 8	97	100.7
FS-1616	16 1/2 x 16 1/2	16 x 16	191	198.2
FS-1412	17 x 14 1/2	14 1/2 x 12	129	106.7
FS-1608-Hex	16 1/2 x 10 1/2	10 x 8	110	51.4

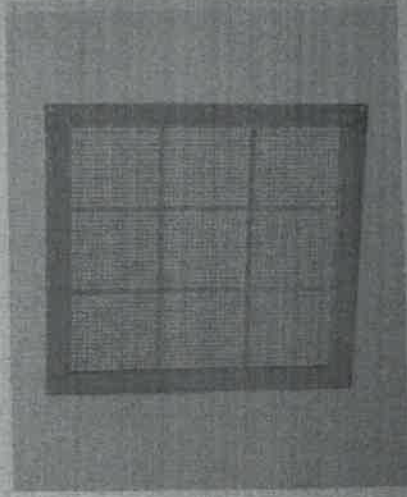
¹For SL: 1 inch = 25.4 mm; 1 ft = 304.8 mm
²Available for use as under-floor ventilation.



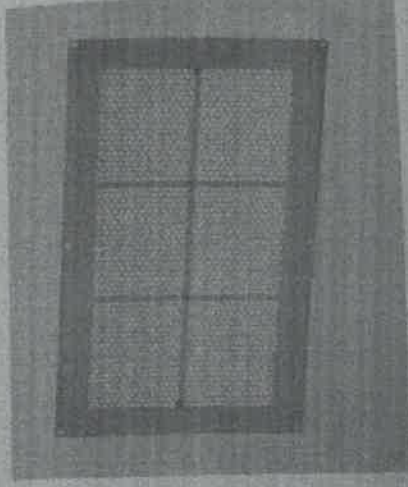
FS-1412



FS-1608



FS-1616



FS-1608-Hex

FIGURE 1—FLOOD SOLUTIONS STATIC FLOOD VENTS